Abstract: The Suttas indicate physical conditions for success in meditation, and also acceptance of a not-Self tile-principle (primarily vinnana) which is (usually) dependent on the mortal physical body. In the Abhidhamma and commentaries, the physical acts on the mental through the senses and through the 'basis' for mind-organ and mind-consciousness, which came to be seen as the 'heart-basis'. Mind acts on the body through two 'intimations': fleeting modulations in the primary physical elements. Various forms of rupa are also said to originate dependent on citta and other types of rupa. Meditation makes possible the development of a 'mind-made body' and control over physical elements through psychic powers. The formless rebirths and the state of cessation are anomalous states of mind-without-body, or body-without-mind, with the latter presenting the problem of how mental phenomena can arise after being completely absent. Does this twin-category process pluralism avoid the problems of substance-dualism?

The Interaction of Body and Mind in Spiritual Development

In the discourses of the Buddha (Suttas), a number of passages indicate that the state of the body can have an impact on spiritual development. For example, it is said that the Buddha could only attain the meditative state of jhana once he had given up harsh asceticism and built himself up by taking sustaining food (M.I. 238ff.). Similarly, it is said that health and a good digestion are among qualities which enable a person to make speedy progress towards enlightenment (M.I. 95). The crucial spiritual quality of mindfulness (sati), moreover, is first developed with processes of the physical body as object. This enables mindfulness to be strengthened, before being applied to more illusive mental states.

It is also clearly stated that the attainment of jhana, meditative trance, has a marked effect on the body. Of the first of the four jhanas, it is said that the meditator, "drenches, saturates, permeates, suffuses this very body with joy and happiness" (M.I. 276ff.). On the third jhana, Buddhaghosa also refers to "the
exceedingly superior rupa [matter] originated by that happiness associated with the group of mental states (nama-kaya)” (Vism. 163).

Physical and mental/spiritual states are thus seen as constantly interacting; they are not two totally separate spheres. As Winston King says:

At any given moment of experience, body-mind represents an intimate organic unity. For though Buddhism recognizes a polarity between mental and physical constituents of sentient beings, it never sharply divides them but on the contrary strongly emphasizes the close relationship of all mental and physical states. (1964, p. 19)

The 'Life-principle' (Jiva) and the 'mortal body' (Satira)

The Buddha was often asked a set of questions known as the 'undetermined (avyakata) questions' which included 'is the life-principle the same as the mortal body' and 'is the life-principle different from the mortal body?'. The questions are said to be 'undetermined' because the Buddha did not accept any of the views expressed in the questions. He 'set aside' the questions as time-wasting and misconstrued. The crucial reason that he saw them as misconstrued was that he saw them as asking about a permanent Self (S. IV. 395). In the case of the above questions: how is a permanent Self/life-principle related to the mortal body? As he did not accept such a Self, he could not accept any view on how it was related to the body! Apart from this, he also seems not to have accepted either view because he saw body and that which enlivened it as neither identical nor totally distinct. That is, while he did not accept a permanent life-principle, he accepted a changing, empirical life-principle. This life-principle was partly dependent on the mortal physical body, but not in such a way that the death of the body destroyed it; this would be to deny rebirth. The life-principle is normally sustained by (and sustains) the body, but it can be sustained without it, too.

The evidence for the Buddhist acceptance of a 'life-principle' is as follows. At D.I. 157-58, the Buddha is asked the undetermined questions on the life-principle. Part of his reply is that one who had attained any of the four meditative jhanas would not give either answer. The same is then said of someone in the fourth jhana who applies his mind to 'knowledge and vision' (nana-dassana). Elsewhere, 'knowledge and vision' is said to consist of a series of meditation-based knowledges (D.I. 76-7). The first is where one comprehends:
This body (kayo) of mine has form (rupi), it is made from the four great elements, produced by mother and father ... is subject to erosion, abrasion, dissolution and disintegration; this is my consciousness (vinnana), here supported (sitam), here bound.

This suggests that one who is proficient in meditation is aware of a kind of life-principle in the form of consciousness (perhaps with some accompaniments), this being dependent on the mortal physical body. In this, consciousness is like its synonym citta, which is said to be 'without a mortal body (asariram)' (Dhp. 37) but to be 'born of the mortal body (sarira-ja)' (Thag. 355).

The early Buddhist understanding of the life-principle, in the context of rebirth, can be seen at D. II. 332ff. Here, the materialist prince Payasi feels that he has disproved rebirth as, when he put a criminal man in a sealed jar and let him die, he saw no life-principle leaving the jar when it was opened. In order to show that this gruesome 'experiment' does not disprove rebirth, Maha-Kassapa argues that, as the prince's attendants do not see his life-principle 'entering or leaving' him when he dreams, he cannot expect to see the life-principle of a dead person 'entering or leaving' (D. II. 334). Thus the life-principle is not denied, but accepted, as an invisible phenomenon.

Certainly, the start of life, at conception, is seen as involving the flux-of-consciousness, from a past life, entering the womb and, along with the requisite physical conditions, leading to the development of a new being in the womb:

'Were consciousness, Ánanda, not to fall into the mother's womb, would mind-and-body (nama-rupa) be constituted there? 'It would not, Lord'. 'Were consciousness, having fallen into the mother's womb, to turn aside from it, would mind-and-body come to birth in this present state?'. 'It would not, Lord.' (D. II. 62-3)

It can thus be seen that the life-principle referred to by Maha-Kassapa seems to be, in the main, the flux of consciousness which enters the womb at conception and leaves the body at death.

In arguing against another 'experiment' of Payasi concerning a life-principle, Maha-Kassapa says that a body "endowed with vitality, heat and consciousness" is lighter and more pliable than a dead body, just as a heated iron ball "endowed with heat and (hot) air" is lighter and more pliable than a cool one (D. II. 334-5). Moreover, only a body so endowed can be aware of sense-objects, just as a conch-shell-trumpet will only make a sound when "endowed with a man, an effort and air" (D. II. 337-8).
A third simile is that of a fire-drill which will only make fire when properly used, not when chopped up to look for the 'fire' in it (D. II 340-2). That is, the life-principle is not a separate part of a person, but is a process which occurs when certain conditions are present, namely 'vitality (ayu)', 'heat (usma)' and consciousness. This life-principle complex relates to the body like heat and surrounding hot air to heated iron. A more modern analogy might be to see it as like the magnetic-field of a piece of magnetized iron: both heat and magnetism may be a property of iron, but this does not prevent them being transferred to something else: an analogy for rebirth.

It can thus be seen that the 'life-principle' accepted by the Suttas is a complex of 'vitality, heat and consciousness'. 'Heat' is a physical process, 'vitality' consists, according to the Abhidhamma, of one 'life-faculty' (jivit-indriya) which is physical, and one which is mental, and consciousness is mental. This complex consists of conditionally arisen changing processes, which are not identical with the mortal body (except for heat and the physical life-faculty), nor totally different from it, but partly dependent on it. If the life-principle is taken as a (non-existent) substantial Self, it is meaningless to say that 'it' is the 'same as' or 'different from' the mortal body, but if it is recognized as not-Self, then these views can be seen as actually false. The life-principle is neither the same as nor different from the mortal body, as the relationship is that of the mingling of mutually-dependent processes. Thus at S.I. 206, when a nature-spirit (yakkha) says "'Material shape is not alive (na jivan)' say the Buddhas, then how does this [life-principle] find this mortal body?", the Buddha replies by outlining his view of the stages of embryonic growth. As seen above, the mortal body of a person develops because consciousness, the crucial factor in the life-principle process, enters the womb at conception; consciousness then remains supported by and bound to the body (though meditation can lead to it becoming less dependent on the body: see below).

The Inter-relation of Nama and Rupa

The most common way of dividing the component processes of a person is into 'nama', literally 'name' and 'rupa', 'form', 'material shape'. Rupa is said, in the Suttas, to consist of the 'four great elements', or the four 'primaries': solidity (literally 'earth'), cohesion (literally 'water'), heat (literally 'fire') and motion (literally 'air'), and rupa 'derived' (upadaya) from these. The Theravadin Abhidhamma enumerates the forms of 'derived' rupa as follows:

1-5: the sensitive parts of the five physical sense-organs;
6-9: visible appearance, sound, smell and taste;
10-12: the faculties of femininity, masculinity and physical life;
13-14: bodily intimation and verbal intimation (see below);
15: space;
16-23: lightness, pliability, workableness, integration, maintenance, ageing, and impermanence of rupa, and nutritive essence (Dhs. section 596); later texts also add the 'heart basis'--see below.

Of these, items 10-23 cannot be sensed by the physical sense-organs, but are known only by the mind (Dhs. 980), be this by inference or clairvoyance. Apart from the occurrence of the 'four great elements' and the various forms of 'derived' rupa, all of which are mutually conditioning in various ways, there is no 'material substance': rupa is just the occurrence of these states or processes. However, D. J. Kalupahana argues that the four primary elements can be seen as 'material substance' as they are the underlying basis of 'derived' matter (1976, p. 100). He compares this with John Locke's idea of material 'substance' as an imperceptible basis which must be postulated as the 'support' for material qualities such as hardness, shape or color. This comparison is inappropriate, though, for the Abhidhamma holds that the primary elements can be directly sensed, by touch (at least in the case of solidity, heat and motion). He likewise holds that citta is like a mental 'substance' as 'mental states' (cetasikas) depend on it. But again, citta is not an unexperienceable support of that which can be experienced. It is itself experienceable. Having wrongly argued that the four elements and citta are like two substances, Kalupahana then wrongly interprets a text as saying that these cannot interact (1976, p. 99). He cites Ask 313, "Where there is a difference of kind, there is no stimulus. The Ancients (porana) say that sensory stimulus is of similar kinds, not of different kinds." Kalupahana sees this as saying that mind and matter cannot affect each other, whereas the context shows that it is simply saying the the sensitive part of a sense-organ only responds to the relevant kind of stimulus (e.g. the ear to sounds).

In the Suttas, nama is used to refer to all aspects of mind except consciousness itself. In later texts, it usually also includes consciousness. As 'name' it essentially refers to those states which are intensional: which take an object. According to the Abhidhamma, this differentiates all such states from the rupa states, which never take an object (Dhs. 1408). On the other hand, states of nama (i.e. mental states) have no rupa, or 'form', 'material shape'.

In the Abhidhamma, mental states and material states are seen as interacting from the moment of conception. The Patthana Vol. I, pp. 5, 8, 9; see CR. I. 5-11) holds that, at this time, states of nama and rupa are mutually related to each other by a number of conditions, the meaning of which is explained by Vism. 535:
i) conascent (sahajata) condition (the states support each other by arising together);
ii) mutuality (annamanna) condition (the states mutually arouse and consolidate each other, like sticks in a tripod supporting each other);
iii) support (nissaya) condition (the states act as a foundation for each other, as earth is a support or foundation for trees);
iv) presence (atthi) and non-disappearance (avigata) conditions.

Moreover (p. 7), throughout life, mental states act as 'post-nascent' conditions for physical ones, i.e. they help to consolidate those physical states which have already arisen (Vism. 537).

The commentator Buddhaghosa explains the inter-dependence of the two at Vism. 596. On its own, nama lacks efficient power, for it does not eat, speak or move; likewise rupa lacks efficient power, on its own, for it has no desire to do such things. Each can only 'occur' when 'supported by' (nissaya) the other. The relationship between the two is like that of a blind man (rupa) who carries an immobile cripple (nama) on his shoulders: together they can prosper. They are like two sheaves of reeds which lean against each other and support each other (Vism. 595). Buddhaghosa then quotes an undetermined source in support of his position:

They cannot come to be by their own strength, Or yet maintain themselves by their own strength; Conforming to the influence of other dhammas, Weak in themselves and conditioned, they come to be. They come to be with others as condition. They are aroused by others as objects; They are produced by object and condition And each by a dhamma other [than itself]. (Vism. 596-7)

Of course, the reference to 'object', here, shows that the lines mainly concern nama.

The Action of the Physical on the Mental

The most obvious way in which the physical affects the mental is through the process of perceiving objects. From the Suttas it is clear that consciousness (and other mental states) arise dependent on sense-organ and sense-object. A common refrain is:

Eye-consciousness arises dependent on the eye and visible shape; the coming together of the three is
stimulation; from stimulation as condition is feeling; what one feels one cognizes ... (e.g. M.I. 111)

Parallel things are also said about ear-consciousness, nose-consciousness, tongue-consciousness, body-consciousness and mentation-consciousness. M.I. 190 makes it clear that a sense-consciousness is not only conditioned by a sense-organ and its object, but also by an appropriate act of attention. Again, in the Adhidhamma, it is clear that the arising of a sense-consciousness is not only conditioned by physical factors, but also by mental ones: the previous moments of cifra such as the bhavanga state, the latent ground state of consciousness (Ptn. I. 312-13, 369; CR. I. 338-39, 407; Vism. 458-60). That is, consciousness is dependent on physical states, but also on previous states of consciousness and other mental states.

What, though, is said of whether there is a physical basis for mind-consciousness? The Abhidhamma clearly specifies that there is such a basis (vatthu), though it does not specify what it is. The Patthana (Vol. I, p. 5; see CR. I. 6) says:

The rupa supported by which mentation-element (mano-dhatu) and mentation-consciousness-element (mano-vinnana-dhatu) occur, that rupa is related to them and their associated states by support condition ... by presence condition ... by non-disappearance condition.

Likewise it is said (p. 72):

Conditioned by eye-sense-sphere is eye-consciousness; ... conditioned by basis (vatthu) are (karmically) fruitional and functional indeterminate (mental) groups. Moreover, karmically active mental states are also seen as conditioned by such a basis (ibid). However, the physical 'basis' of mind is itself said to be dependent on mental states, from the moment of conception (p. 70). While this basis is always a 'prenascent' (i.e. prior) condition for mentation (that which adverts to objects), it is not always so for mentation-consciousness (p. 71). This must be because, at conception, mentation-consciousness is that which is transmitted from a dead person and, on entering the womb, conditions the development of a new psycho-physical organism, including mentation and the physical basis for the
In the ongoing flow of life, the mental dhammas mutually condition each other, but are also conditioned by the physical 'basis' (ibid.).

In the later Theravada tradition, the physical 'basis' of mind is specified as the 'heart-basis' (hadaya-vatthu) (Vism. 537), and this was added to the list of types of 'derived' rupa (the Sarvastivadin tradition remained uncommitted as to what the 'basis' was). The heart was probably chosen as, in terms of immediate experience, many emotional states seem to be physically centered in the middle of the chest. Certainly, many of the physical sensations associated with meditation are 'felt' here.

The 'heart-basis' is said to act as the 'support' for mentation-element and mentation-consciousness-element, and to 'uphold' them, being itself dependent on the blood (Vism. 447). Buddhaghosa sees the 'basis' as a tiny region of the heart (Vism. 256), and dismisses the brain as a lump of marrow in the skull (Vism. 259). W. F. Jayasuriya, though, argues that 'heart' is not literally meant, and that what may be referred to is the entire nervous system (including the brain): which certainly is dependent on (the oxygen supply in) blood (1963, appendix A). Yet if the 'basis' is seen as present from conception, it cannot be identified, as such, with either the heart or nervous system in their fully developed forms.

Buddhaghosa also holds that in being the 'basis' for mind-consciousness, the heart-basis is not a 'door' for consciousness, like eye-sensitivity (Vism. 451). That is, it is not a place where consciousness receives content from outside (Asl. 85). It simply supports its occurrence. Similarly, it is not a 'door' to setting up activity in the body, as 'bodily intimation' and 'vocal intimation' are (Vism. 451).

The Mind's Action on the Body

Perhaps the main way in which the mind produces effect in the body is through states of mind leading to speech and physical behavior. In the Theravadin Abhidhamma, the two crucial intermediaries in these situations are:

i) 'vocal intimation' (vaci-vinnatti);
ii) 'bodily intimation' (kaya-vinnatti).

In the Dhammasangani (sec. 596), these are described as forms of 'derived (upada) matter (rupa)'. That is they are forms of matter dependent on the 'four great elements'.

'Bodily intimation' is defined (Dhs. 636) as follows:
That state of bodily tension or excitement, or state of excitement, on the part of one who advances, or moves back, or fixes the gaze, or glances round, or retracts an arm, or stretches it forth: the intimation, the making known, the state of having made known a citta (mind-moment or thought) ... 

Dhs. 637 says much the same on 'vocal intimation'. That is, both are seen as physical states which make known a thought. As Buddhaghosa says, they 'display intention' (Vism. 448f.) and communicate (Asl. 82 and 87), as among states of rupa which are 'citta-born and 'citta-caused', as 'originated from citta'. However, the two intimations are the only kind of rupa which are said to be 'coexistent with citta' (Dhs. 669) and to 'follow after citta' (Dhs. 671). That is they are the only kind of material dhammas that last no longer than a moment of citta, and change in unison with citta.

In his commentary on these passages, though (Asl. 337), Buddhaghosa explains that, "in the ultimate sense", only the phenomena on which the two intimations depend are genuinely "originated from citta", and neither are they literally "coexistent with citta". This is because a cifra exists only for one seventeenth of the time a rupa dhamma lasts (Vism. 614). In fact, Buddhaghosa sees the two intimations as only 'nominal' dhammas (Vism. 450): they are not separate dhammas, but only aspects of other 'real' rupa dhammas, which can be said to be genuinely 'originated from citta'. They are 'nominal' in a similar way to that in which the 'impermanence' of rupa is a nominal dhamma.

As Asl. 83 explains:

Now the body originated from citta: that is not 'intimation'. But there is a certain alteration in the mode (akara-vikaro) of the primary (physical) elements when set up by citta, through which, as condition, the motion element is able to strengthen and agitate the conascent body. This is intimation.

More specifically, Vism. 447-8 says:

Bodily intimation is the alteration in the mode in the citta-originated motion element that causes the occurrence of moving forward etc., which alteration in the mode is a condition for the tension, upholding and moving of the conascent rupa-body.

Similarly, Vism. 448 sees vocal intimation as an 'alteration in the mode in the citta-originated solidity element'.
Thus the two intimations are seen as fleeting modulations in the 'motion' and 'solidity' elements, which modulations can last as long as a citta (mind-moment), but not as long as other rupa dhammas. They are 'nominal' dhammas as they are merely modulations of other 'real' dhammas.

Thus the mind sets up movement in the body by altering the mode of rupa produced by citta. Non-solid mind does not so much 'bump into' extended, solid matter, as modulate the way in which aspects of matter arise. Note that the 'motion/air' element might be related to the modern concept of electrical discharges in the nerves: at M.I. 185ff., there is reference to "airs/winds which shoot across several limbs". In that case, the mind would move the body by effecting the electrical modulation of nerve discharges.

The Meaning of 'Citta-originated'

The discussion still leaves the meaning of 'citta-originated' (citta-samutthana) rupa states to be determined. Dhs. 667 holds that the two intimations are always 'citta-originated', and that certain other rupa dhammas, including the four primary elements, may be, when they are 'born of citta', 'citta-caused' (citta-ja, citta-hetuka). Does this imply that citta can actually create certain kinds of matter, or what?

The Patthana (Vol. I, pp. 22-23) holds that there are four ways in which a rupa dhamma may 'originate': by citta, by karma, and by natural physical processes related to 'nutriment' and temperature. Nevertheless, citta cannot 'originate' matter on its own: citta-originated rupa arises dependent on the primary elements, and skilful or un-skilful mental processes (ibid). This is because any 'derived' rupa depends on the primary elements, and these always arise dependent on each other. Thus the position of the Theravadin Abhidhamma seems to be that citta can produce or create certain kinds of matter, but not literally 'out of nothing', for 'citta-originated' matter is also dependent on other forms of matter.

The kind of mental processes that can 'originate' rupa are said to include: desire, energy, thought (citta), investigation (when concentrated these are the 'four bases of psychic power'), volition, and meditative trance (jhana) (Ptn. I, pp. 2, 7, 8). These act as conditions for the origination of rupa dhammas by being conascent with them (i.e. born at the same time), and supporting them by their continued presence (pp. 5, 8, 9).

As explained by Buddhaghosa (Vista. 624):
The citta-originated becomes evident through one who is joyful or grieved. For the rupa arisen at the time when he is joyful is smooth, tender, fresh and soft to touch. That arisen at the time when he is grieved is parched, stale and ugly.

This clearly implies that mental states effect the kind of physical states that arise in the body. As Asl. 82 says:

When a thought 'I will move forward or step back' occurs, it sets up bodily qualities. Now there are eight groups of these bodily qualities: the four primaries ... and the four depending on these: color, odor, taste, and nutritive essence [examples of 'derived' rupa]. Among these, motion strengthens, supports, agitates, moves backward and forward the conascent material body.

The Mind-made Body

While mental processes are normally seen as conditioned by physical ones, there are said to be situations where this is less so than normal. Thus one Sutta passage, after referring to an awareness of consciousness as dependent on the physical body (see above, life-principle section), refers to a meditative state in which the meditator applies himself to calling up a 'mind-made body' (mamo-maya kaya):

He calls up from this body another body, having form, mind-made, having all limbs and parts, not deficient in any organ. Just as if, O king, a man were to pull a reed out of its sheath, he would know 'This is the reed, this the sheath. The reed is different from the sheath. It is from the sheath that the reed has been drawn forth'. (D.I. 77)

This shows that that consciousness is seen as able to leave the physical body by means of a mind-made body. Such a body could be seen as a kind of 'subtle body', for a being with a mind-made body is said to feed on joy (D.I. 17), not on solid nutriment (D.I. 195): it thus lacks the four great elements of the physical body (solidity, cohesion, heat and motion: D.I. 195). As such a body relates to the 'realm of (pure) form', the subtle matter composing it can only be visible and audible matter (Vibh. 405). However, the mind-made body is invisible to the normal eye (Pati. II. 209). It occupies space, but does not impinge on gross physical matter, for the 'selfhood' of a certain god with a mind-made body is said to be as large as two or three fields, but to cause no harm to anyone (A. III. 122).
With such a body, a person can exercise psychic powers such as going through solid objects, being in many places at once, or flying (D.I. 78).

**Psychic Powers**

In the Suttas, there is a standard list of meditation-based 'psychic powers' (iddhis). These include: multiplying one's form; going through a wall as if through space; diving into the earth as if through water; walking on water as if on the ground; flying, crosslegged, through the air (M.I. 494). The Buddha is said to have claimed that he could do these either with his mind-made body, or with his physical body of the four elements (S.V. 283). At D. II. 89, for example, the Buddha crosses a river by simply disappearing from one bank and instantaneously appearing on the other.

Such powers, if one is to take them seriously, clearly involve remarkable 'mental' control of matter, whether this be the matter of one's own body or of objects passed through, for example. In discussing such powers, Buddhaghosa says that when, for example, diving into the earth, the earth usually only becomes water for the performer (Vism. 396), but it can also become water for others too. This suggests that, when psychic powers are exercised by means of the 'mind-made' body, there is no effect on ordinary matter, but that when it is done with the physical body, such matter is affected.

The late canonical text the Patisambhidamagga goes into some detail on how the powers are developed. They require that a person has attained one of the meditative jhana states and has developed the four 'bases of psychic power': concentration of desire, of energy, of thought and of investigation (Pati. II. 205). As seen above, these four states are listed in the Patthana as mental states which can 'originate' rupa states. To develop the power of diving through the earth, the meditator attains meditative concentration by focusing on water, then makes water appear where there is earth (p. 208). To walk on water or fly, meditation is on earth, then earth is made to appear in water or the air (ibid). The implicit principle, here, is that by focusing on, investigating, and gaining knowledge of an element (e.g. earth/solidity), one can gain power over it, and change other elements into it. The later tradition, though, holds that all physical matter contains all four primary elements, though in different 'intensity'. Thus to change water into earth, the solidity element in it becomes predominant rather than the cohesion element.

All this suggests that, in the Buddhist view, the mind purified, calmed and tuned by meditative concentration has great transformative power over matter, and that the physical world is not as stable as is normally seen. Its transformation is not seen as 'miraculous' or super-natural, though, just super-normal. It is done in a law-like way by drawing on the power of the meditative mind.
**The Formless State**

However much the mind is seen as normally inter-dependent with body, Buddhism also accepts that there are levels of existence where only mental phenomena exist, with nothing whatever of rupa. These are the four 'formless' (arupa) rebirths:

i) the sphere of infinite space;  
ii) the sphere of infinite consciousness;  
iii) the sphere of nothingness;  
iv) the sphere of neither-cognition-nor-non-cognition.

They correspond exactly to four meditative states, with the same names, attainable from the fourth jhana. The first is attained by transcending any cognition of rupa; that is, by abandoning the mental image that was previously the object of concentration, and seeing that space is infinite. In the second state, the focus is on the consciousness that had been aware of infinite space. In the third, this object is dropped, and the focus is on the apparent nothingness remaining. In the fourth, this object is dropped and the mind is in an attenuated state where it is hardly functioning (Vism. ch. x).

In these rebirth realms, there are feelings, cognitions, constructing activities such as volition, and mind-consciousness. There are none of the five forms of sense-consciousness, nor even mind-element (mano) (Vibh. 407). The 'beings' of such a level are clearly seen as totally bodiless, but this means that their mode-of-being is far from normal. Their 'mode of personality' (atta-patilabha) is said to be 'formless, made of cognition' (D.I. 195), and their predominant awareness is of such things as infinite space. Thus, while they can be seen as composed of mind separated from any matter, this separation leads to a transformation in their nature: mind cannot be separated from matter without this having an effect on mind. A 'formless' being has thoughts devoid of any kind of sense-perceptions.

**The State of Cessation**

From the meditative sequence described above, going through the 'formless' attainments, it is also held that a further state can be attained by a meditator. This is the 'cessation of feeling and cognition', or simply the 'attainment of cessation'. This is an anomalous state that, by the combination of profound meditative calming, and of meditative insight, all mental states come to a complete halt. The mind totally shuts down, devoid of even subtle feeling and cognition, due to turning away from even the very refined peace of the fourth formless level. In this state, the heart and breathing stop (M.I. 301-02), but a residual metabolism keep the body alive for up to seven days. Only an Arahat, the highest saint who
has fully attained Nibbana, or a Non-returner, the second highest saint, can experience cessation (A. III. 194; Vism. 702); they emerge from it experiencing the 'fruit' of their respective attainment (Vism. 708). It is thus one possible route to experiencing Nibbana.

In the Suttas, it is said that, while a dead person is without vitality and heat, and their sense-organs are 'scattered', a person in cessation still has vitality and heat, and his sense-organs are 'purified' (M.I. 296). In other contexts (D. II. 334-5), it is said that a living person is one endowed with 'vitality, heat and consciousness'. At M.I. 296, it is notable that there is no reference to consciousness. In the Theravadin view, as expressed by Buddhaghosa in chapter 23 of Vism. (pp. 702-9), cessation is 'the non-occurrence of citta and mental states as a result of their successive cessation' (p. 702). A person in this state is 'without citta' (p. 707). Not even the latent form of mind present in dreamless sleep, bhavanga, is said to be present. A person in this state is seen as only a body, with no mental states whatever.

The philosophical problems this raises is: when the meditator emerges from this state, and mental states recommence, how does this occur? If there are only physical states occurring in cessation, does this mean that mind re-starts thanks to these alone? This issue is discussed by Griffiths (1986), looking at the Theravadin, Sarvastivadin, Sautrantika and Yogacara views on the matter.

The Suttas emphasize that no thought 'I will emerge' immediately leads up to emergence from the state, but that this occurs simply because the mind of the meditator has been 'previously so developed' (M.I. 302). For the Theravada, Buddhaghosa explains that emergence occurs due to the intention made before cessation was entered. Cessation then lasts for a pre-determined time unless interrupted by death, the call of the monastic community, or of a person's teacher.

Now in Buddhist Abhidhamma theory, mental states only lasts for a micro-moment before decaying and being replaced by other mental-states. Physical states last for slightly longer moments. If this is so, it would seem that the only way an intention can effect a future event is if it sets in train a causal chain culminating in that event. During cessation, the components of that chain can only be physical states. This implies that it is these which lead to the emergence. Griffiths sees this as an implication which the Theravada does not want to embrace, due to its 'dualism', in which mental events are not seen to directly arise from physical ones (1986, p. 37). This overlooks the fact, though, that the Theravadin Abhidhamma does talk of a physical 'basis' for mentation-consciousness and mentation-element (see above). While normally these are also dependent on prior moments of the same type, 'cessation' is clearly not a normal-type state, and so may acceptably be seen as one in which the physical 'basis'
alone, thanks to a prior intention, leads to the arising of mentation-consciousness and mentation-element, at emergence from the state. As even Griffiths admits, the Theravadins see at least one physical event--death--as leading to emergency from cessation. This is because bhavanga, a state of citta, occurs at the moment of death, so that cessation is no longer operative then. As to how the call of the community or a teacher ends cessation, this is not stated. It could be either through stimulating the body to re-start the mind, or perhaps a more direct 'mental' stimulation of the organism.

The Sarvastivadin view of emergence from cessation is that it is directly produced by the last moment of mind before entering cessation. This is possible, in their view, because past, future and present dharmas all 'exist' in some sense. Thus A can directly affect B even if they are separated in time. The Sautrantikas, on the other hand, held that the body alone leads to emergence from cessation, as it has been 'seeded' by prior moments of mind. The Yogacarins (a Mahayana school) hold that a form of residual consciousness remains in cessation. This is the 'store-consciousness' (alaya-vijnana), a concept in some ways similar to the bhavanga citta of the Theravadins.

**Conclusion**

Pali Buddhism's overall understanding of the mind-body relationship is thus as follows:

i) There is a clear differentiation between dhammas which are intensional (part of nama) and those which pertain to material form (rupa).

ii) Nevertheless, not all rupa dhammas can be sensed by a physical sense organ; some must be inferred or clairvoyantly known: thus rupa does not refer simply to that-which-is-(physically)-sensed, as some have held (Johansson, 1979, p. 34).

iii) While nama is centered on citta and rupa is centered on the 'four great elements', there is no dualism of a mental 'substance' versus a physical 'substance': both nama and rupa each refer to clusters of changing, interacting processes.

vi) The processes of nama and rupa also interact with each other, from the moment of conception, mutually supporting each other.
v) For a life to begin, there must be the coming together, in the womb, of appropriate physical conditions and a flow of consciousness from a previous life.

vi) Life continues while there is 'vitality, heat and consciousness' in a person, these comprising a conditioned, empirical life-principle that is neither identical with nor entirely different from the mortal body, but is (normally) dependent on and bound to such a body.

vii) In the normal situation, mental processes are affected by physical ones in that the physical sense enables there to be types of consciousness that would not otherwise exist (the five sense-consciousnesses), and give specific kinds of input-content to the mind; the physical mind-basis also support the occurrence of mentation (that which is aware of mental objects) and mentation-consciousness.

viii) In the normal situation, certain mental processes also lead to the origination of certain types of physical processes (which are also dependent on other physical processes), and some of these (mind-originated motion- and solidity-elements), in turn, may be modulated by mental processes so as to lead to specific bodily movements or vocal articulations.

ix) Death leads to the break-up of the normal mind-body interaction, such that consciousness, and certain accompaniments, flow on to another life.

x) Four of the many forms of rebirth are anomalous in that they remain totally free of physical form: but when there is thus nama unaccompanied by rupa, nama itself occurs in a different way from normal. The mind cannot be simply separated from the body without it undergoing change.

xi) Another anomalous state is that of 'cessation', where there is temporarily a living body and yet no consciousness whatsoever. Again, when nama restarts after cessation, it does so in a new way, with a
deeper level of insight. A plausible route for the restarting of mental processes is the physical mind-basis.

xii) Other non-normal patterns of interaction between mind and body are found in the cases of development of the 'mind-made' body and the exercise of psychic powers. As in the cases of the formless rebirths and cessation, these non-normal cases are dependent on the power of meditation to bring about transformations in the normal pattern of nama-rupa interaction.

The 'mind-body' relationship, then, is seen as a pattern of interaction between two types of processes. The interactions which take place between these two sets of processes are part of an overall network of interactions which also include mental-mental and physical-physical interactions. Neither the two sets, or the processes they comprise, are independent substances, for they are streams of momentary events which could not occur without the interactions which condition their arising. Meditation has the power to alter the usual patterns of interaction into non-normal configurations, which accordingly affect the type of process-events that arise.

As I have argued elsewhere, however, the Pali Suttas (though not later Pali material) includes indications that the early Buddhists regarded consciousness (vinnana) as able to 'break free' of the network of interactions (Harvey, 1989; 1990, pp. 61-68, 58). Indeed, the Suttas often see personality as a vortex of interaction not between nama (including consciousness) and rupa, but between consciousness and nama-rupa (D. II. 32, 63-4, S. III. 9-10). By turning away from all objects, seen as ephemeral and worthless, consciousness could become objectless. 'It' would then not be a limited, conditioned process, but the unconditioned: Nibbana. Unlike the situation of cessation, this would not be the complete absence of consciousness, but the timeless experience of a 'consciousness' which had transcended itself by dropping all objects.

References


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Abbreviations

References are to the Pali Text Society's editions, except in the case of Ptn., where reference is to the Pali Publication Board's edition.

A. Anguttara Nikaya: part of the Canonical Sutta collection.
Asl. Atthasalini: Buddhaghosa's commentary on Dhs. (qv.).
D. Digha Nikaya: part of the Canonical Sutta collection.
Dhp. Dhammapada: part of the Canonical Sutta collection.
Dhs. Dhamma-sangani: part of the Canonical Abhidhamma.
M. Majjhima Nikaya: part of the Canonical Sutta collection.
Pati. Patisambhidamagga: part of the Canonical Sutta collection.
Ptn. Patthana: part of the Canonical Abhidhamma.
S. Samyutta Nikaya: part of the Canonical Sutta collection.
Thag. Theragatha: part of the Canonical Sutta collection.
Vibh. Vibhanga: part of the Canonical Abhidhamma.
Vism. Visuddhimagga of Buddhaghosa.
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